



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,526	12/13/2005	Kenichi Ishikawa	281773US0X PCT	6396
22850	7590	10/17/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER MILLER, DANIEL H	
			ART UNIT	PAPER NUMBER
			1794	
			NOTIFICATION DATE	DELIVERY MODE
			10/17/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/560,526	<b>Applicant(s)</b> ISHIKAWA ET AL.	
	<b>Examiner</b> DANIEL MILLER	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 7/2/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-9,11,16-18 and 21-36 is/are pending in the application.
- 4a) Of the above claim(s) 21-26 and 33-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-9, 11, 16-18, 27-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/2/2008</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Previously submitted claims 21-26 and newly submitted claims 33-36 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The originally claimed invention is an article and the newly submitted claims are a method of making an article having a different classification and wherein there are separate and distinct ways of making the originally claimed article (see applicant's own specification).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 21-26 are withdrawn from consideration as being directed to a non-elected invention. Further, newly asserted claims 33-36 are also withdrawn as being directed to a method not previously presented. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Objections***

2. Claim 30 is objected to because of the following informalities: Applicant has claimed an activated sheet molding method obtained by a method. This claim has been interpreted as claiming an activated sheet molding product and has been considered a claim to a product made by a specific method (i.e. product by process). Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4-8, and 16-18, and 27-32 are rejected under 35 U.S.C. 103(a) as obvious over Susumu (JP 2001-240407) in view of Brownhill (US 4,289,513).

3. Susumu teaches an activated carbon product comprising fibrous material that can be in the form of a honeycomb [0010], a binder material, and a powdery activated carbon [0010]. The binder inherently has water present since it is a liquid. The activated product is capable of use for sorption and filtration of fuel systems for automobile engines.

4. The article is made by processing the activated carbon in a carbon dioxide environment at 600-1200 degrees C for one to 50 hours (see claims and [0012]). The starting material can be Coconut shells [0021]. This is substantially similar to applicant's disclosed starting material and process.

Art Unit: 1794

5. It has been held that where the claimed and prior art products are identical or substantially identical in structure or are produced by identical or a substantially identical processes, a *prima facie* case of either anticipation or obviousness will be considered to have been established over functional limitations that stem from the claimed structure. *In re Best*, 195 USPQ 430, 433 (CCPA 1977), *In re Spada*, 15 USPQ2d 1655, 1658 ( Fed. Cir. 1990). The ***prima facie*** case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed products. *In re Best*, 195 USPQ 430, 433 (CCPA 1977). In the alternative, it would be obvious to optimize the activated carbon content in order to achieve the desired butane adsorption rate.

6. Regarding the processing limitations of claims 7-8, and 14-18 and 27-32, “even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.”, (*In re Thorpe*, 227 USPQ 964,966). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product (*In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983), MPEP 2113).

Art Unit: 1794

7. There is no indication that the specific molding (wet-molding) or the use of a slurry that differentiates the claimed invention's final product from that of Susumu. No patentable distinction is seen.

8. Given the similarity between the product of the claimed invention and the art of record no patentable distinction is seen between the absorption and desorption of gas vapors.

9. Further, it would be obvious to provide the absorption levels claimed by applicant by optimizing the processing conditions to obtain an activated carbon filter that is preferred for particular applications; it is known in the art to employ a filter system that has maximum effectiveness in particular environments, including butane absorption rates, and by optimizing those absorption rates one of ordinary skill would provide the claimed absorption properties. No patentable distinction is seen.

10. Susumu, discussed above, is silent as to the process limitations claimed and the composition of the activated carbon sheet.

11. Brownhill teaches an activated paper product comprising sheets and fibers made from cellulose (column 6 line 3-35), a latex binder material (column 7 line 29-45), and a particulate (powdery) activated carbon (column 8 lines 10-15, 52-60). The latex binder inherently has water present since it is a liquid. The activated product is used for sorption and filtration of fuel systems for automobile engines (column 7 line 20-25). The product is formed into a complex corrugated honeycomb shape comprised of a plurality of connected layers (see figures 1-3). Given that the composition of Brownhill is

Art Unit: 1794

substantially similar to that claimed by applicant it would be expected to have similar properties including its butane adsorption rate.

12. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the activated carbon of Susumu in the form disclosed by Brownhill, because Brownhill teaches it is a known method of producing activated carbon honeycombs, and in order to provide an activated carbon product with adequate structural integrity for use in filtration processes as required by both references.

13. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Susumu in view of Brownhill (US 4,289,513), and further in view of Kosaka (US 5,118,329).

14. Susumu and Brownhill, discussed above, is silent as to the use of the honeycomb structure in a fuel evaporation system having two canisters.

15. Kosaka teaches a fuel evaporation system having two canisters comprising a canister, one having an activated carbon layer (see figures and column 1 line 15-30).

16. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the activated carbon of Susumu in order to adsorb butane in Kosaka because Susumu is used for sorption and filtration and therefore Susumu would be advantageously for use in fuel evaporation system having two canisters as disclosed by Kosaka. It would further be obvious, given the two disclosures, to connect two canisters

Art Unit: 1794

consecutively in order to obtain the added benefit of a multiple filtrations for additive effectiveness in the filtration process.

### ***Response to Arguments***

17. Applicant's arguments with respect to all pending claims have been considered but are moot in view of the new ground(s) of rejection.

18. The affidavit submitted by applicant has been considered but is not convincing. It is clear that the processing conditions taught by Susumu having overlapping processing times and temperatures would not produce activated carbon material within the limitations of applicant's claimed invention.

19. Given the similarity between the product of the claimed invention and the art of record no patentable distinction is seen between the absorption and desorption of gas vapors.

20. Further, it would be obvious to provide the absorption levels claimed by applicant by optimizing the processing conditions to obtain an activated carbon filter that is preferred for particular applications; it is known in the art to employ a filter system that has maximum effectiveness in particular environments, including butane absorption rates, and by optimizing those absorption rates one of ordinary skill would provide the claimed absorption properties. No patentable distinction is seen.

### ***Conclusion***



Art Unit: 1794

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL MILLER whose telephone number is (571)272-1534. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571)272-14011. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel Miller

/KEITH D. HENDRICKS/

Supervisory Patent Examiner, Art Unit 1794